

Fig. 1

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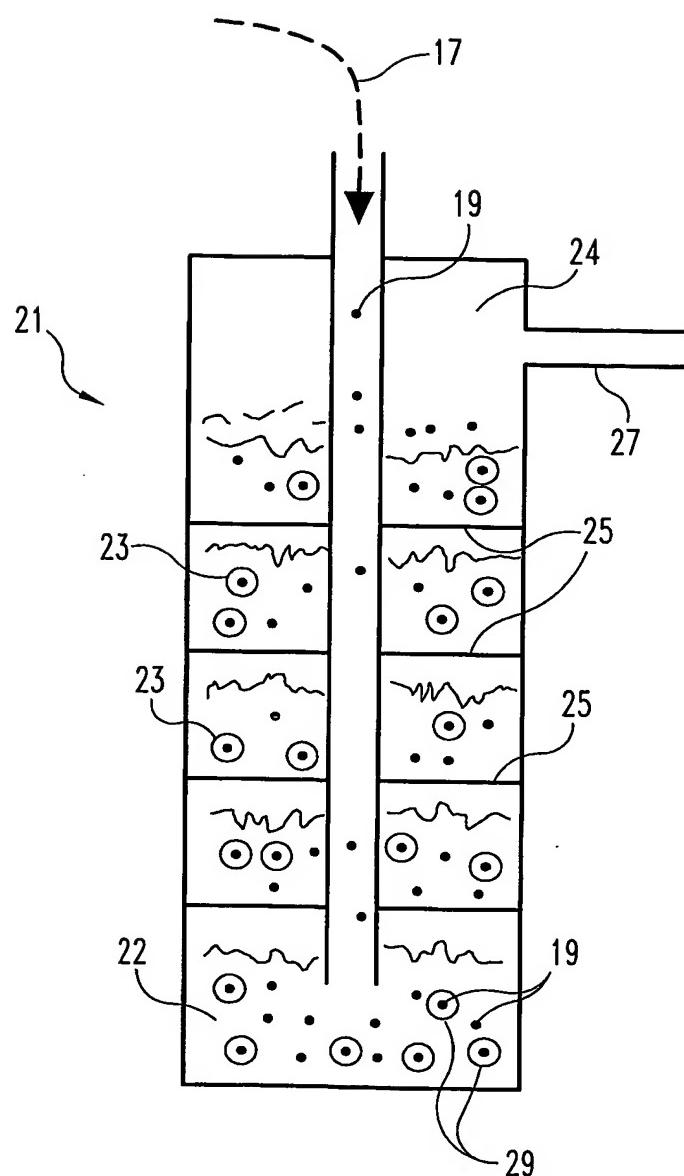


Fig. 2

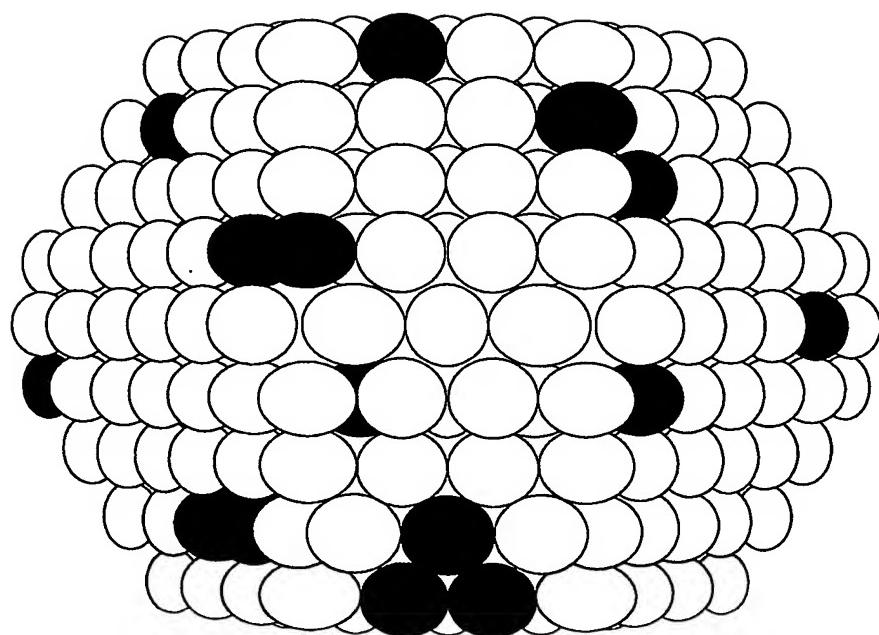


Fig. 3

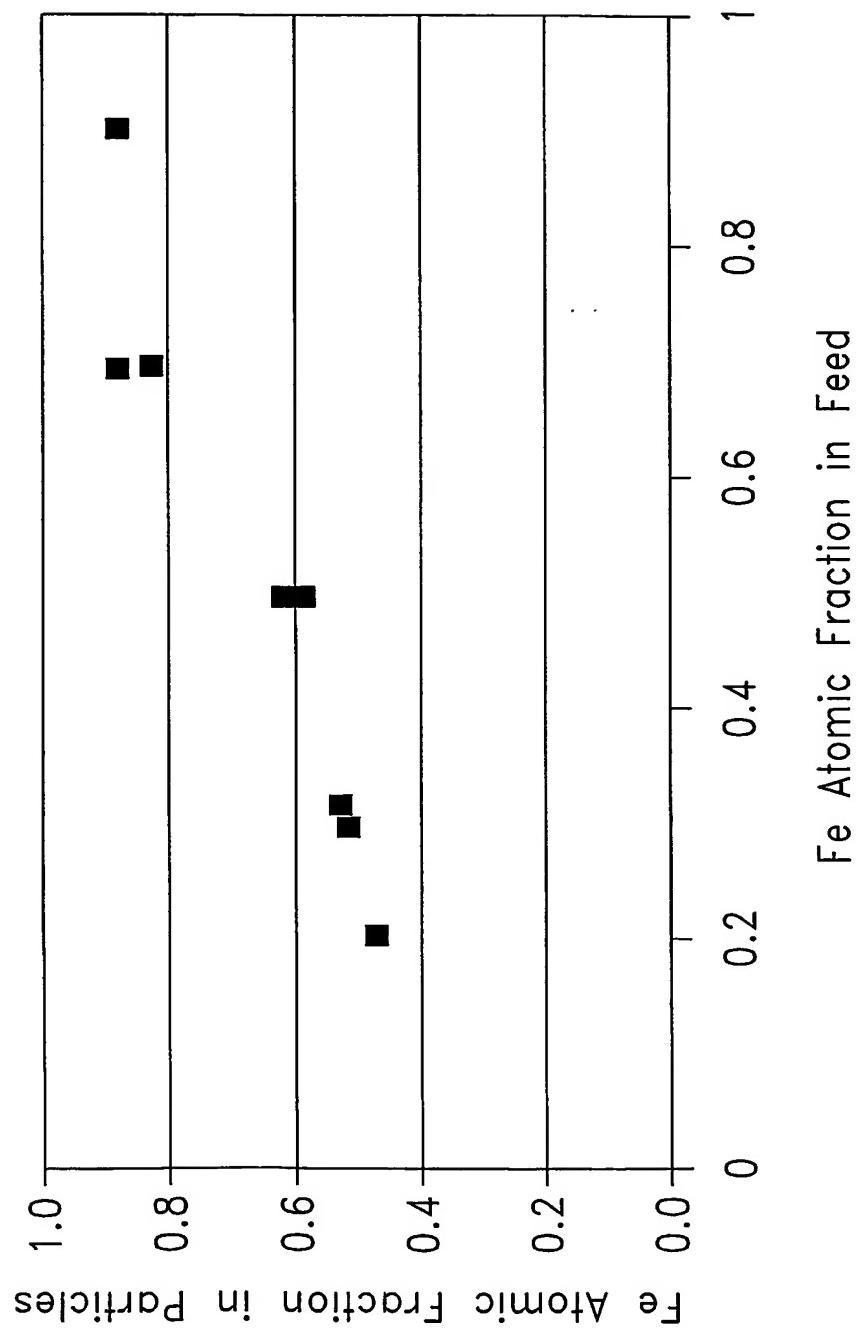


Fig. 4

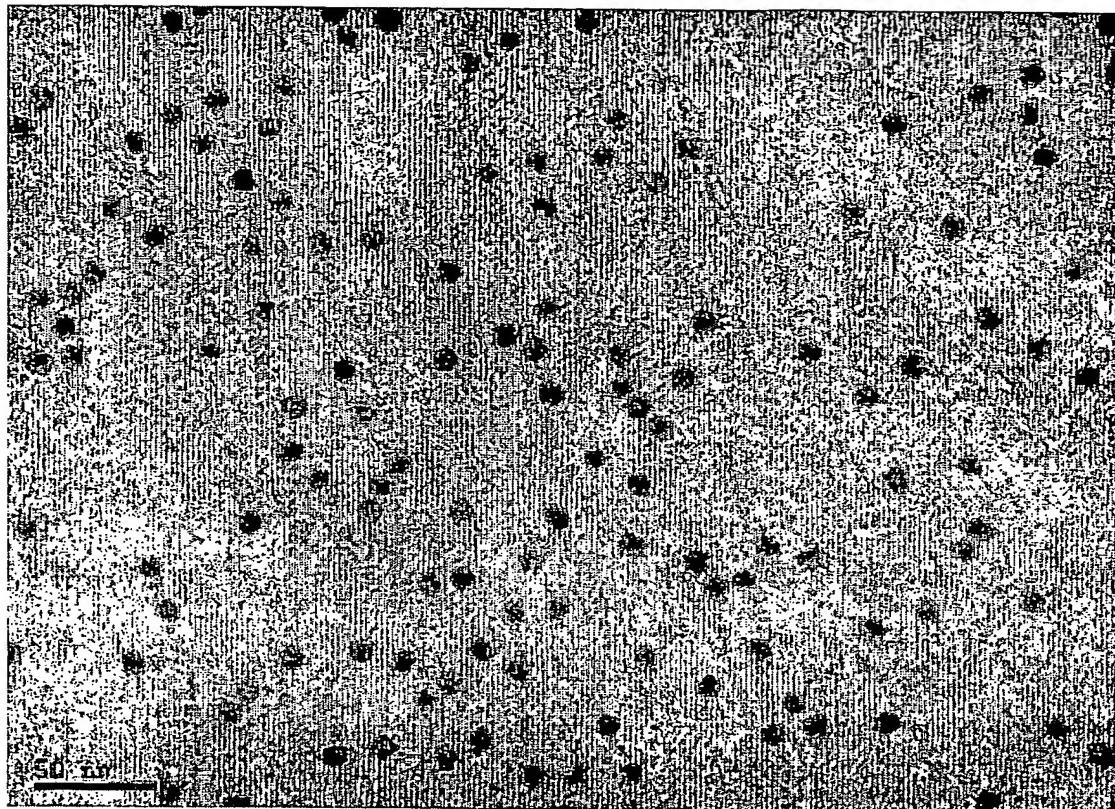


Fig. 5

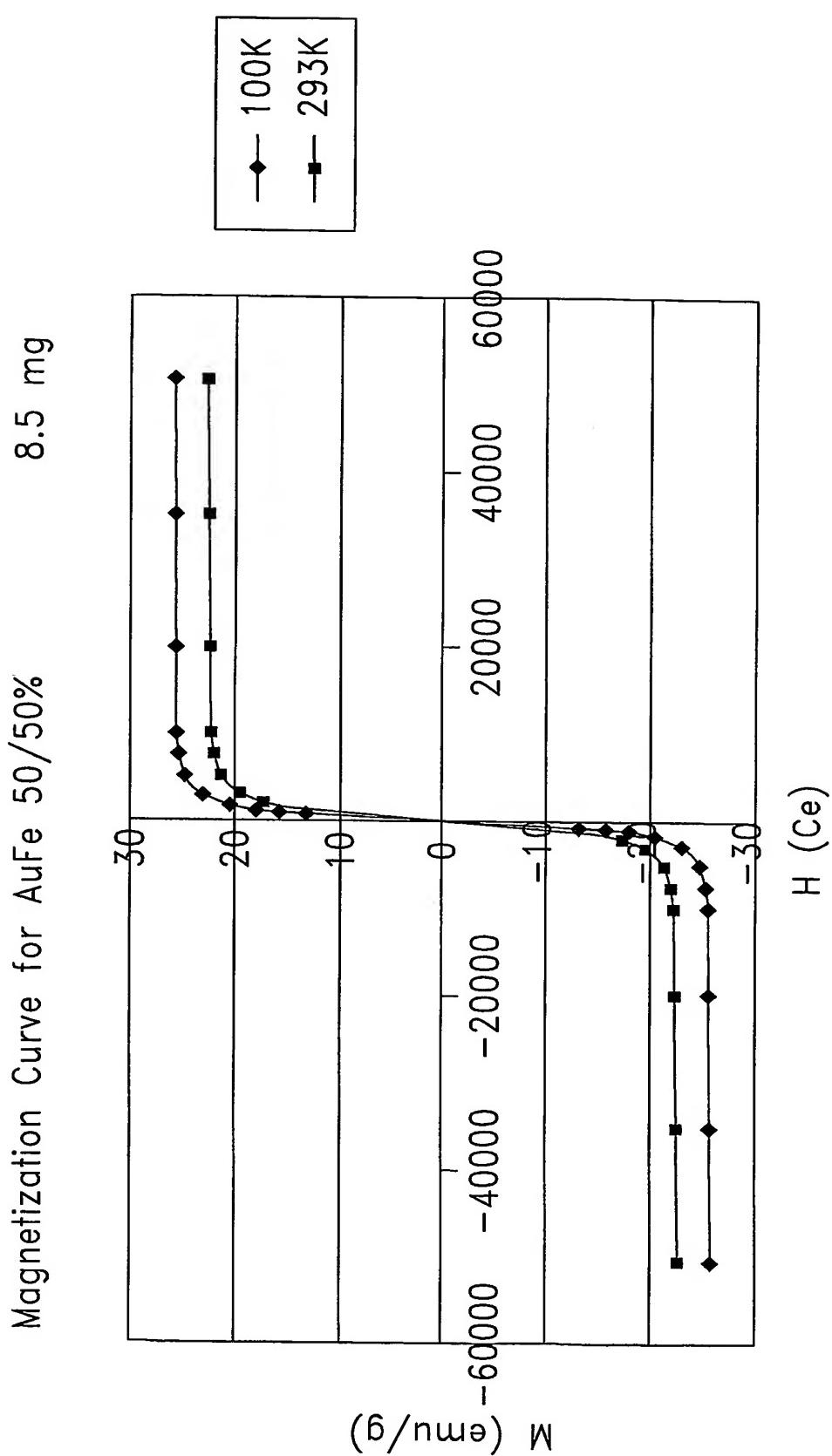


Fig. 6a

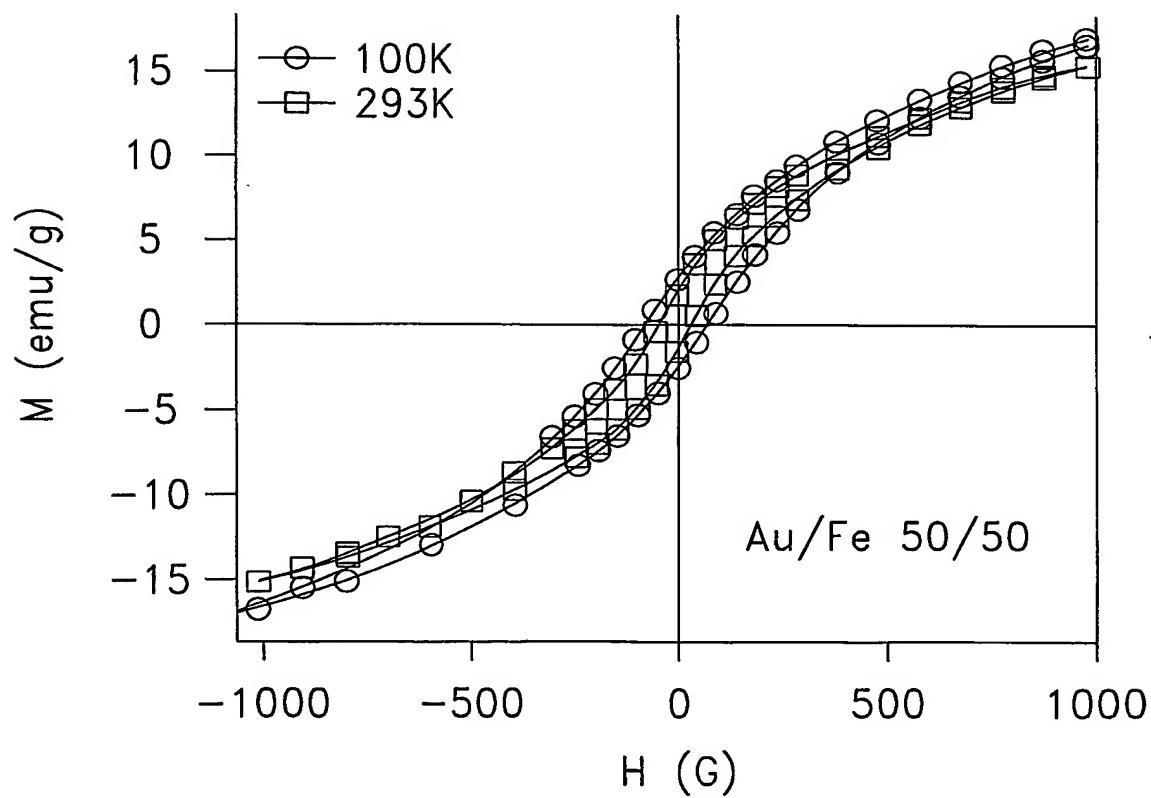


Fig. 6b

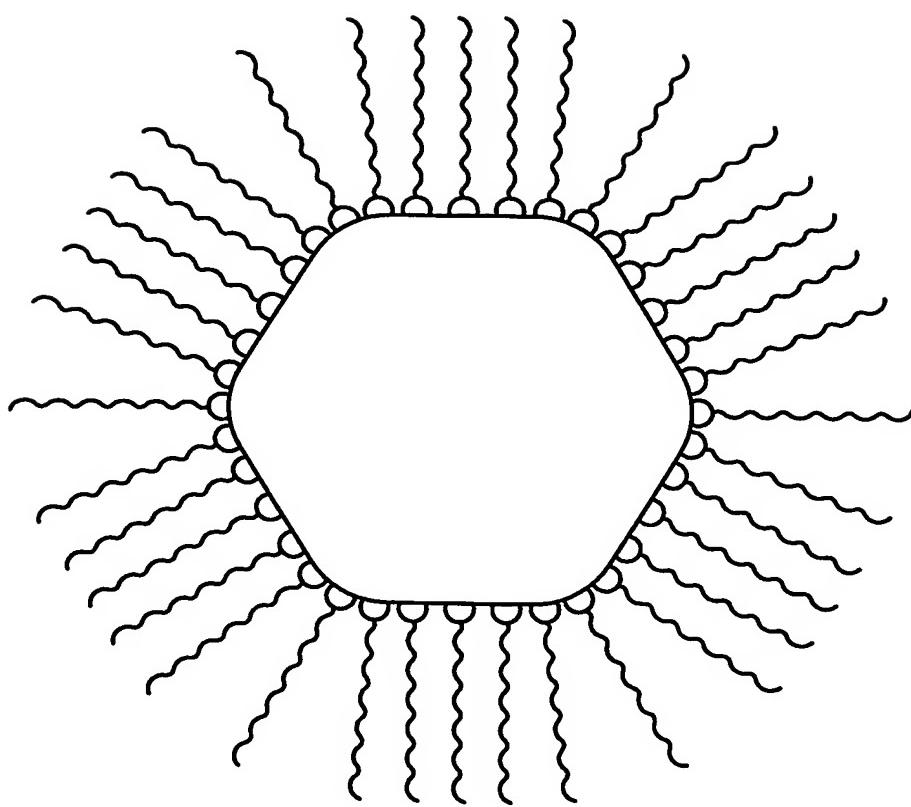


Fig. 7

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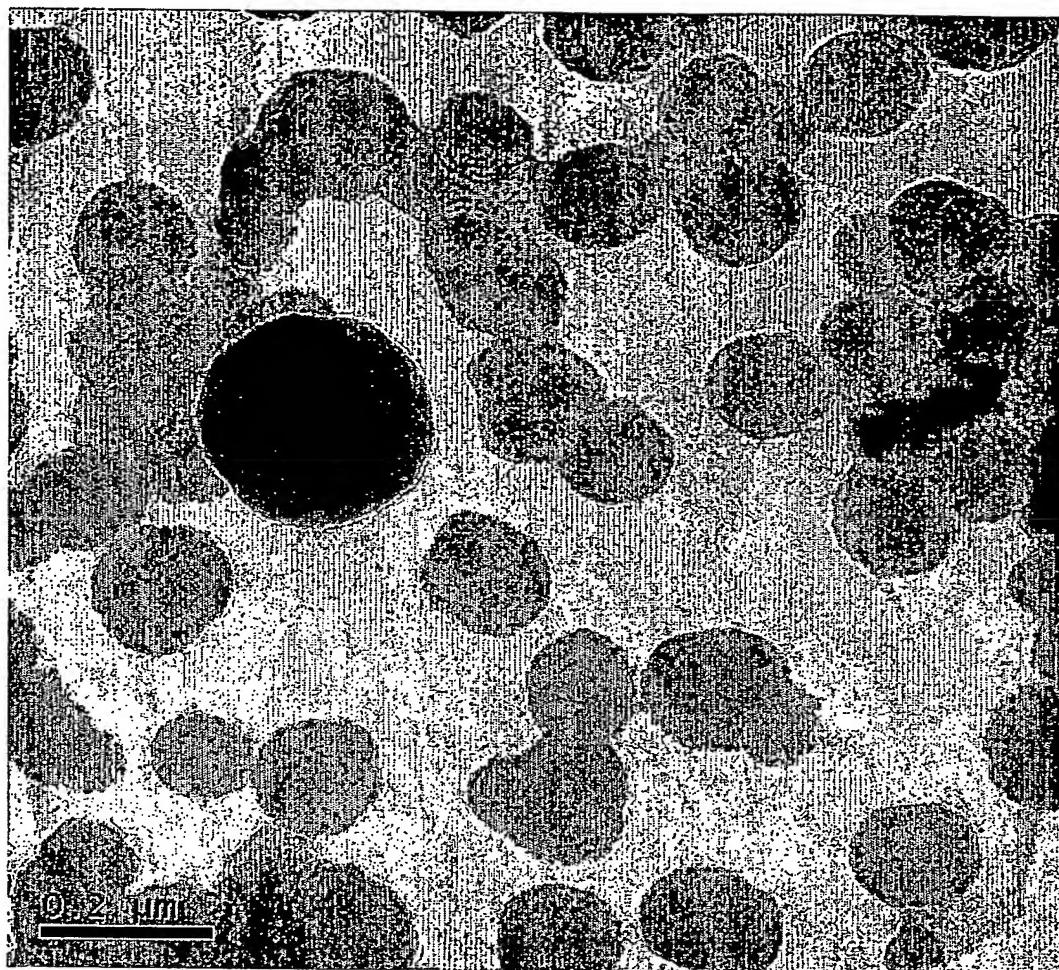


Fig. 8

UV-Vis Spectrum of DNA Functionalized Au Nanoparticles

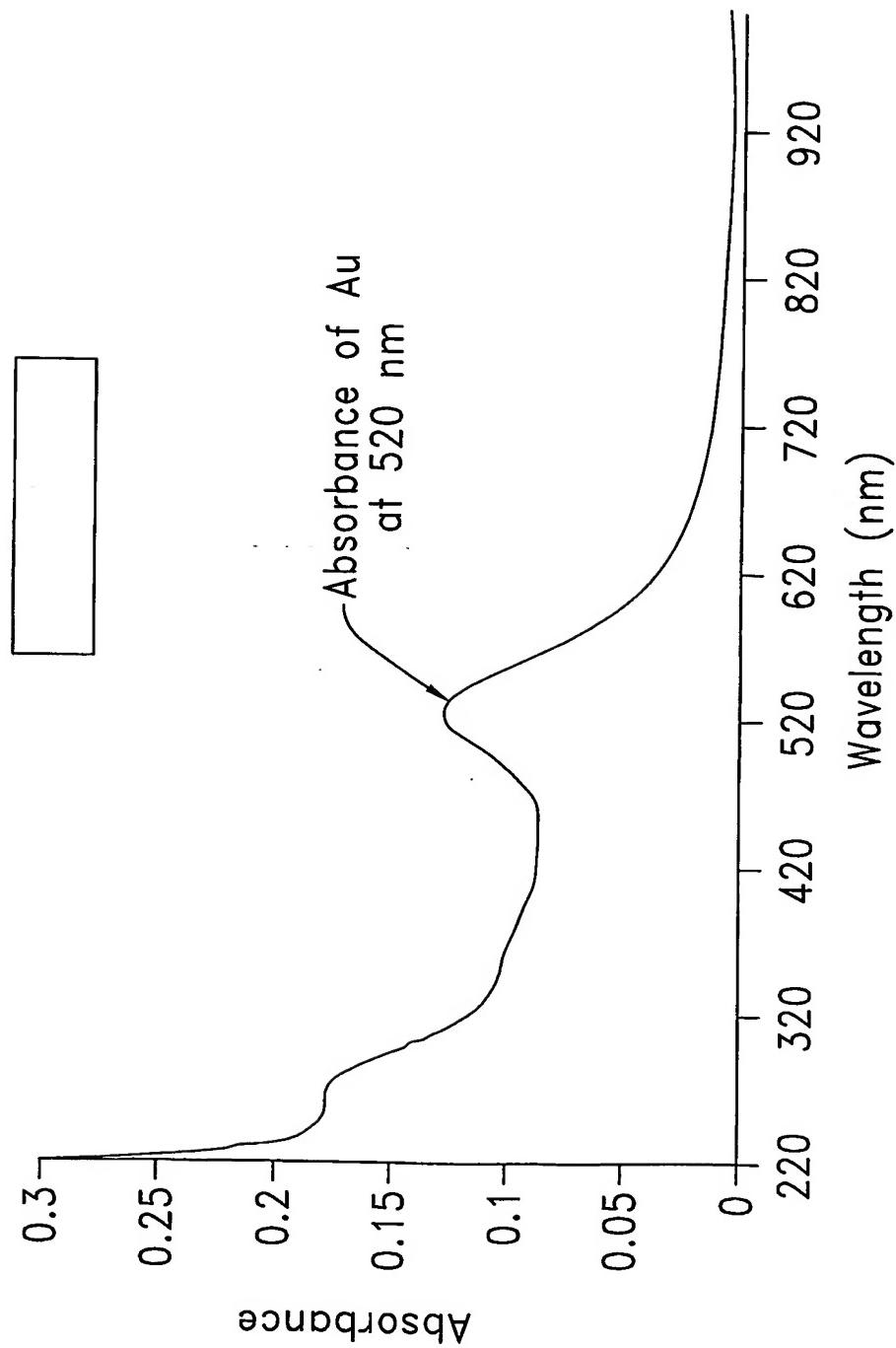


Fig. 9

UV-Vis Spectra of Fe/Au Nanoparticles

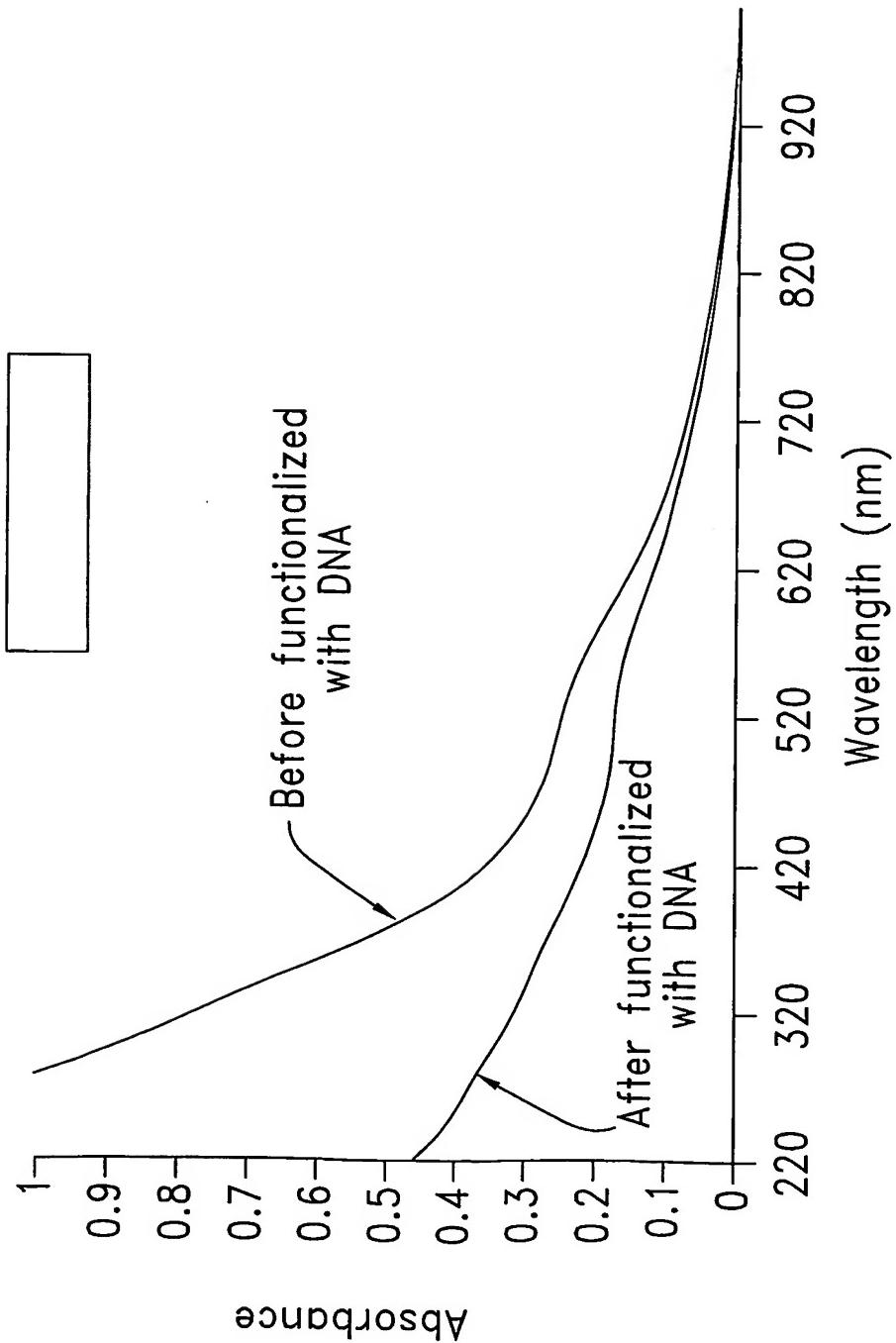


Fig. 10

Experimental DNA Hybridization of Functionalized Nanoparticles

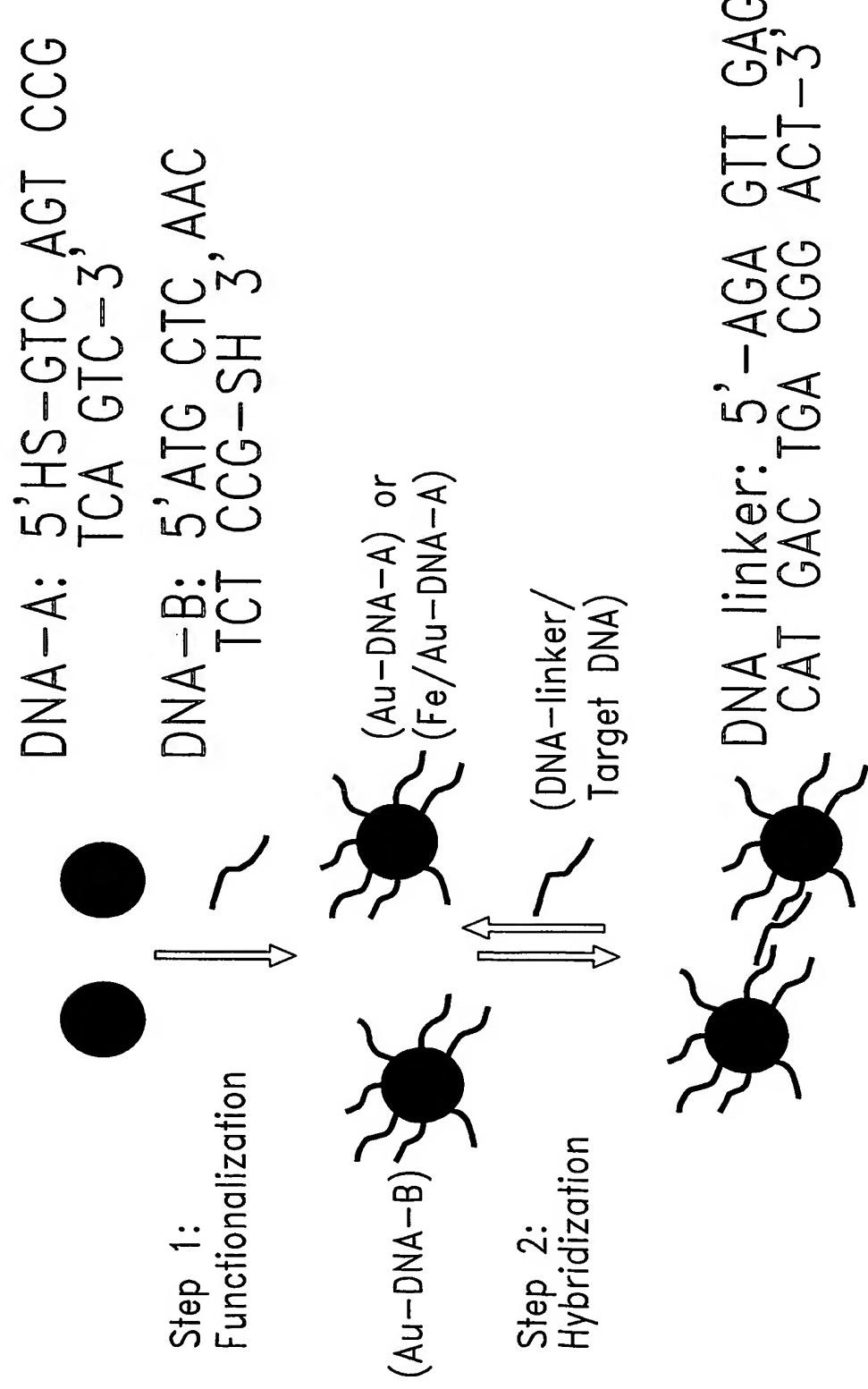


Fig. 11a

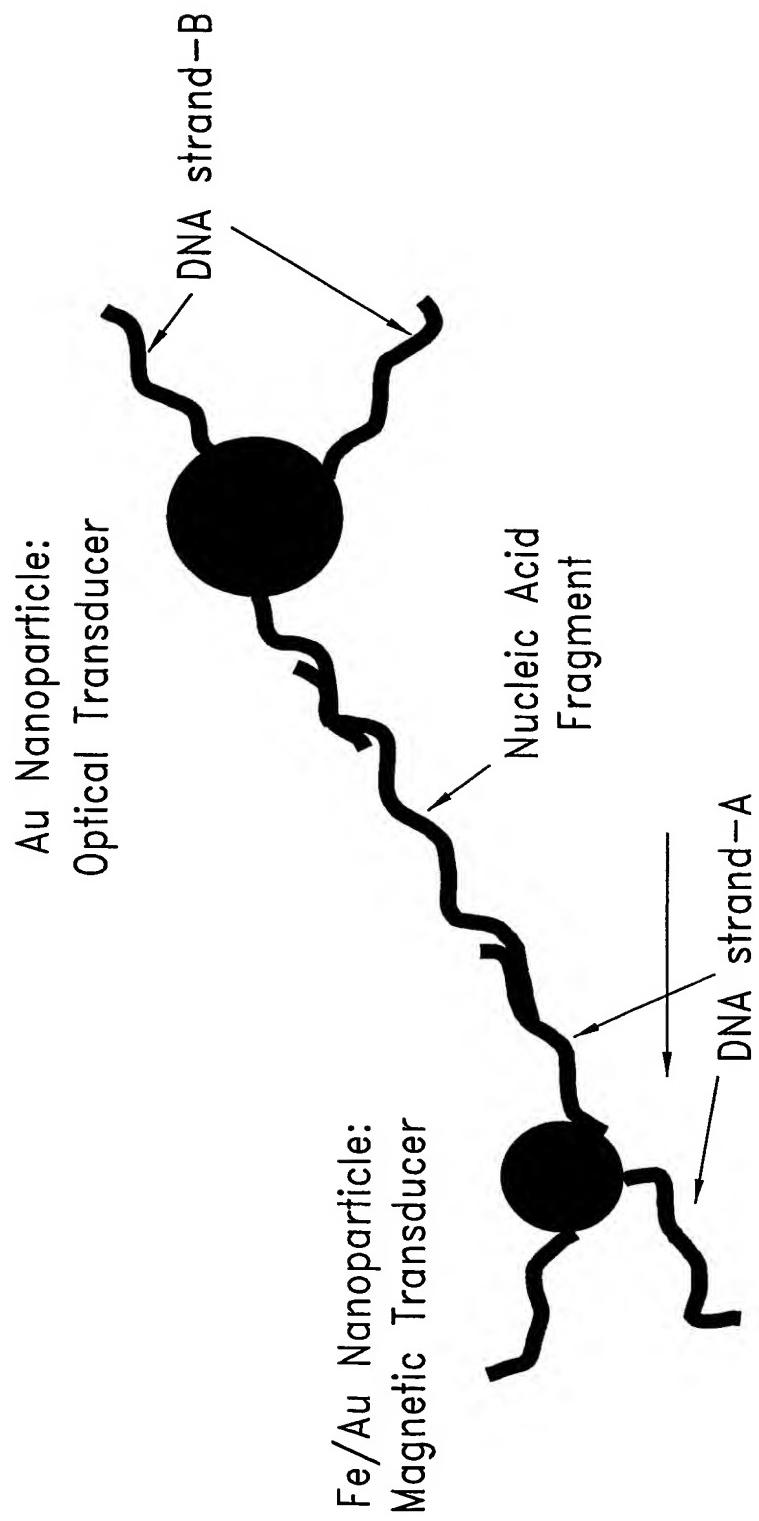


Fig. 11b

UV-Vis Spectra of Hybridized Au:DNA:Au Complexes

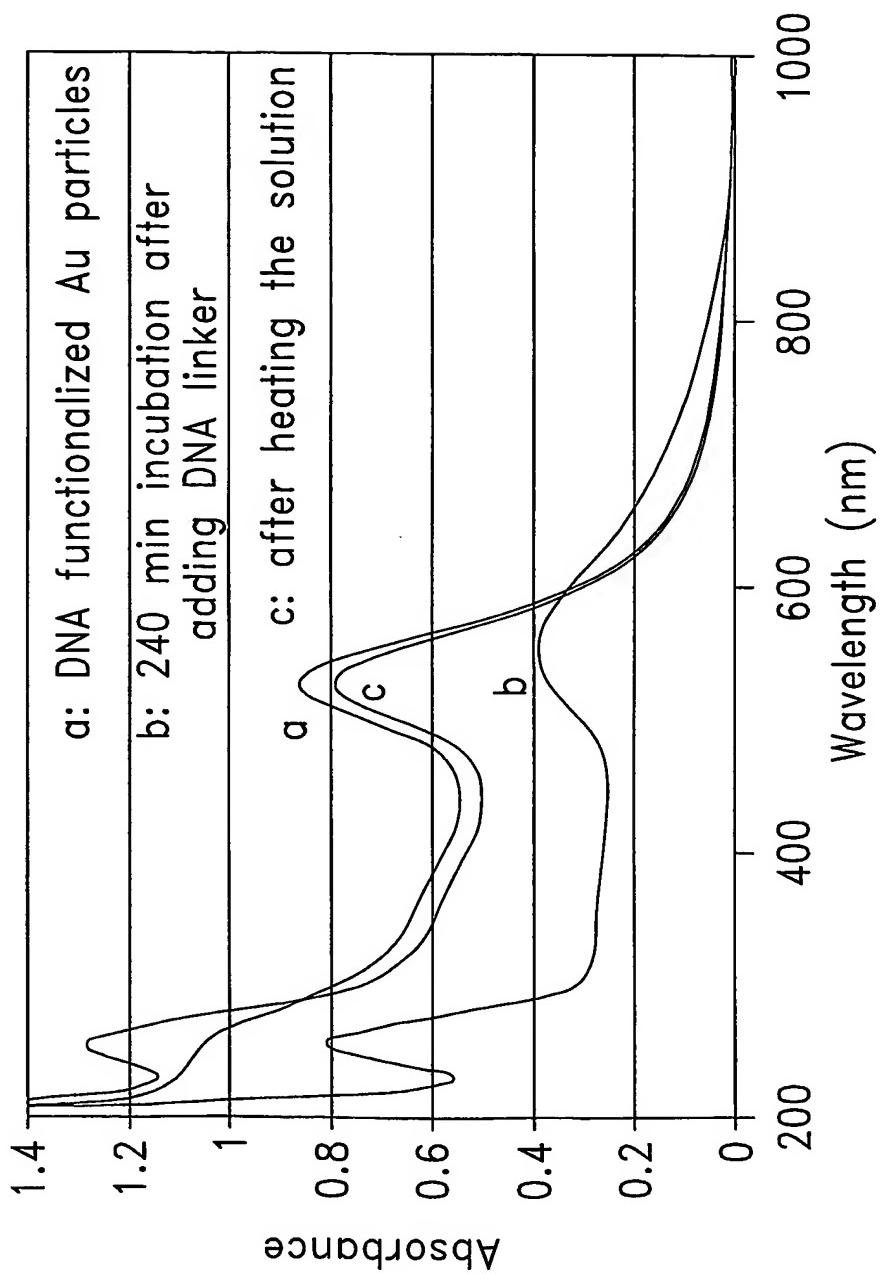


Fig. 12a

UV-Vis Spectra of Hybridized Fe/Au:DNA:Au Complexes

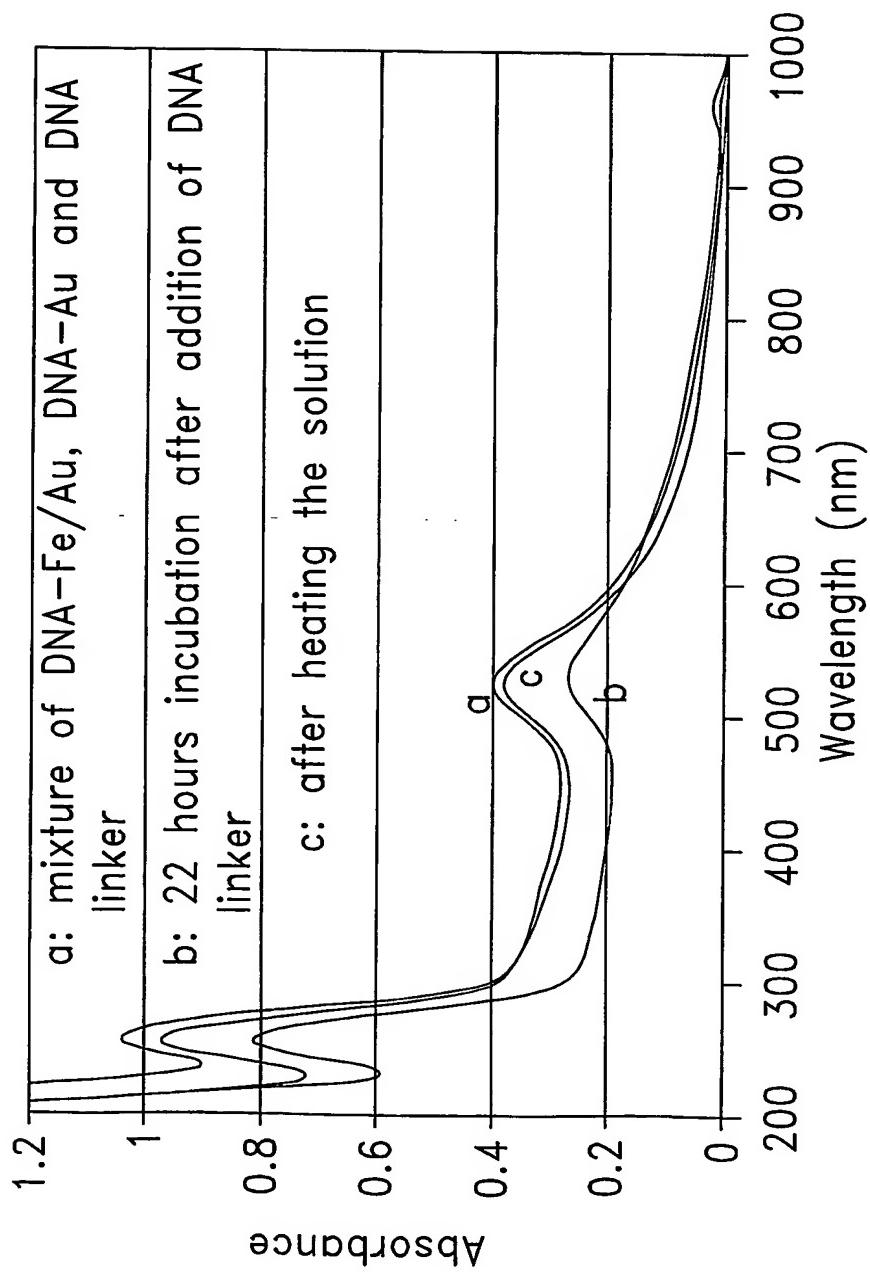
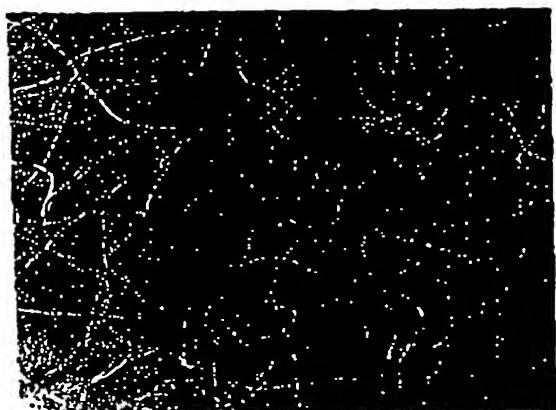


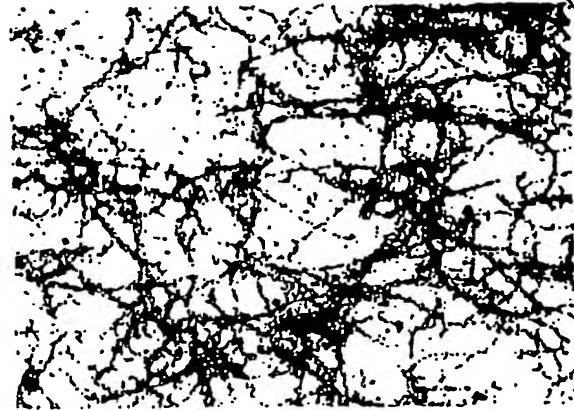
Fig. 12b

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A. Phage only

FIG. 13A



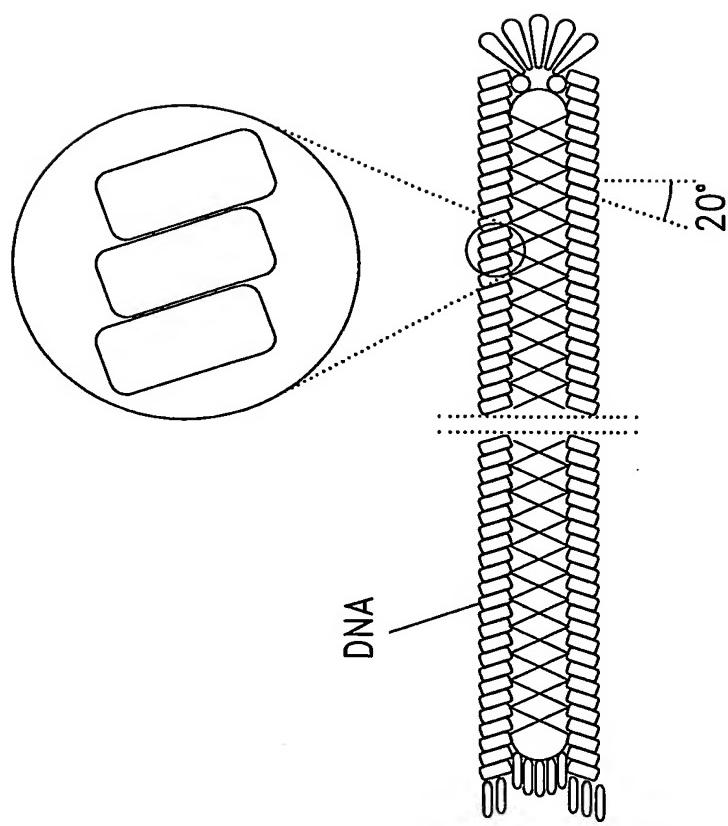
B. Phage + anti M13/Au particles

FIG. 13B



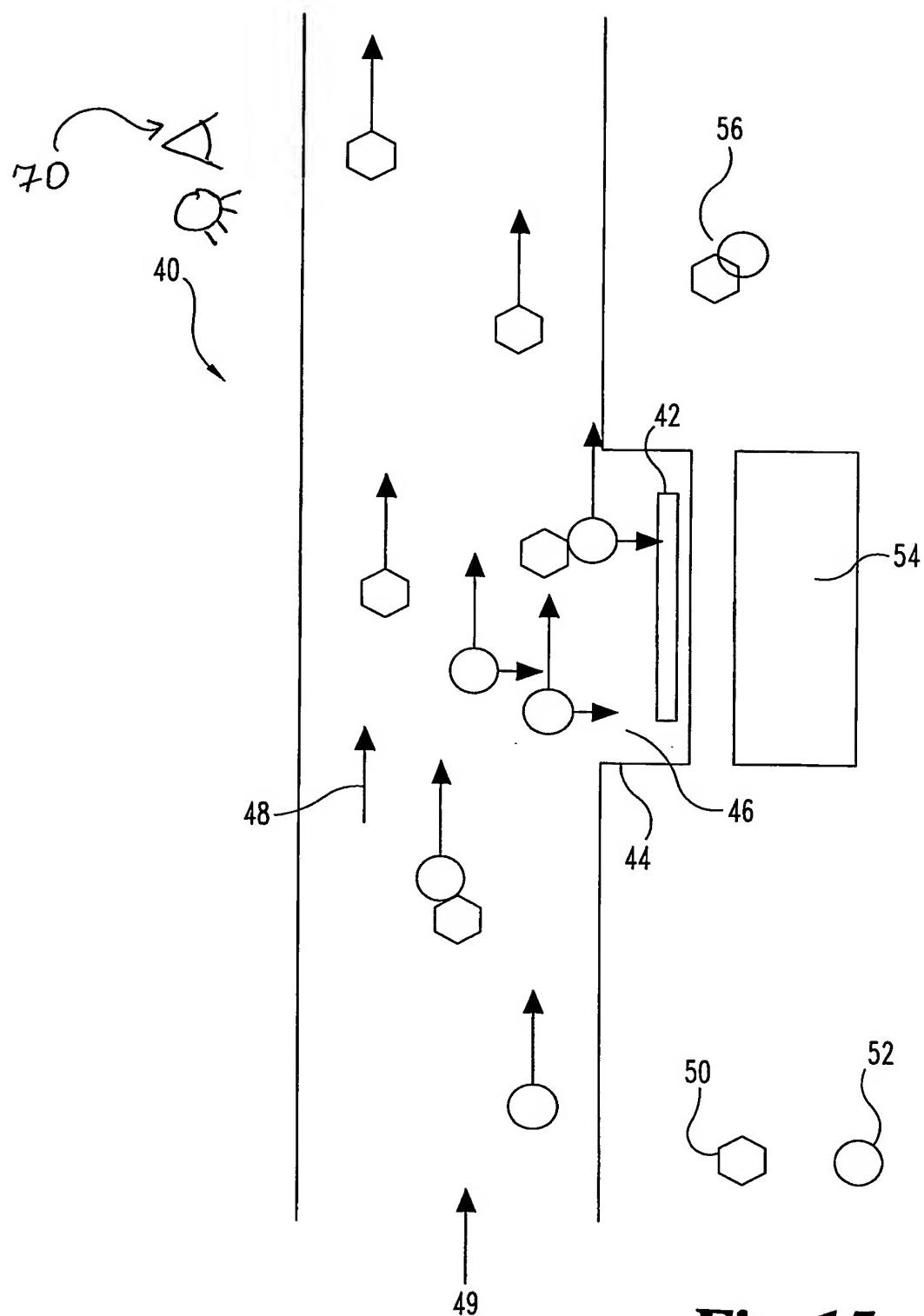
FIG. 13C





- Anti-M13 conjugated Fe/Au particles (specific, 1:1 ratio)
- Anti-M13 monoclonal conjugated Au particles (attached in the body)

Fig. 14

**Fig. 15**

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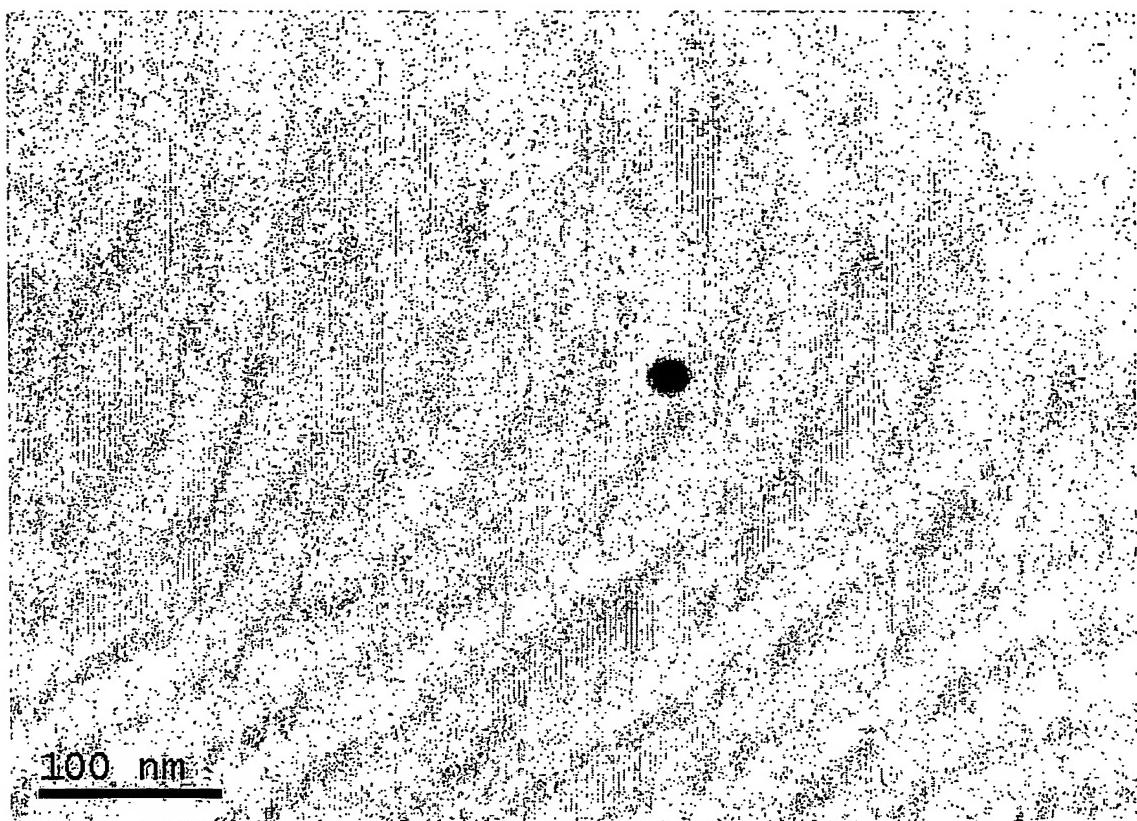


Fig. 16

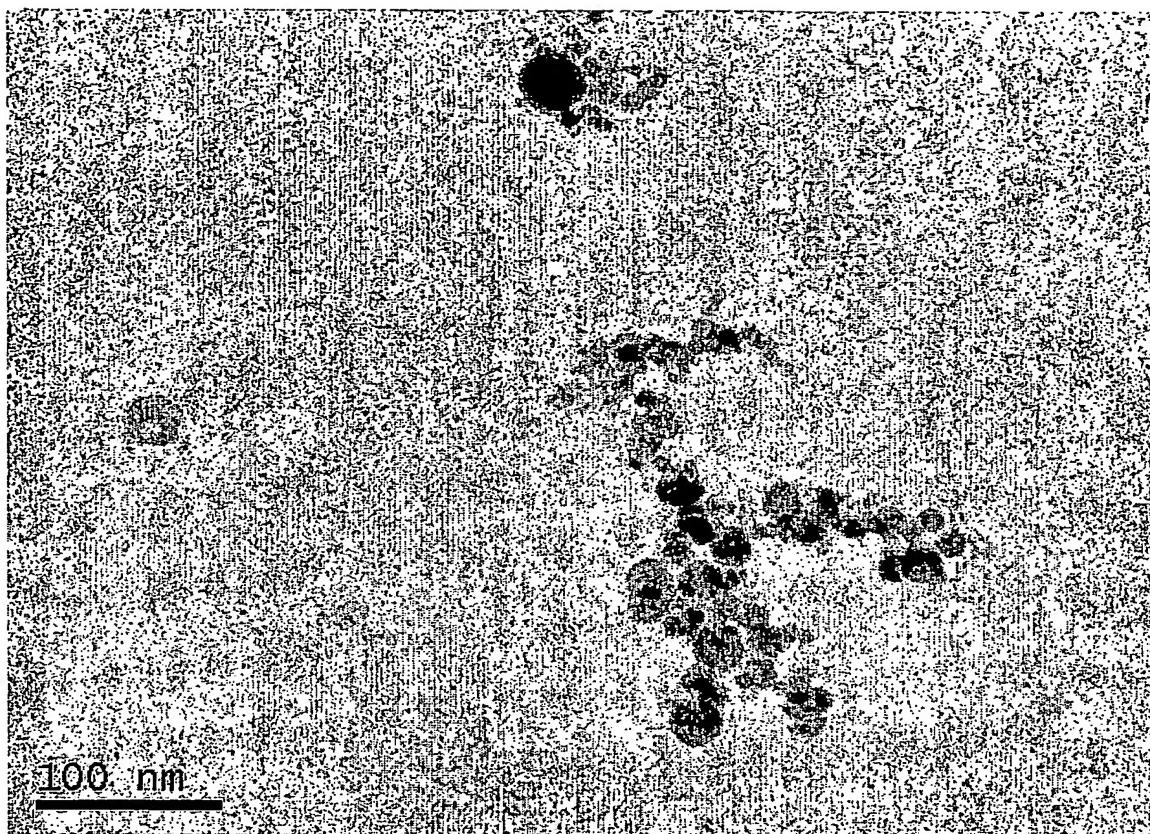


Fig. 17

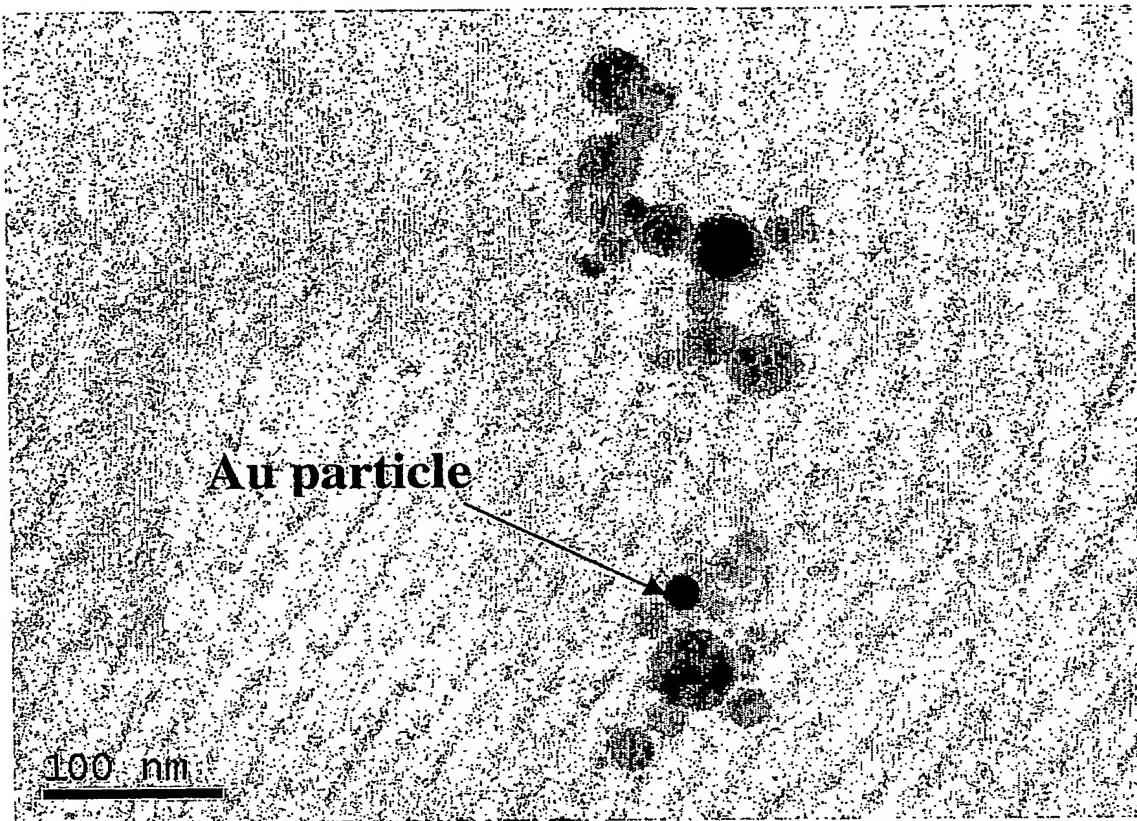


Fig. 18

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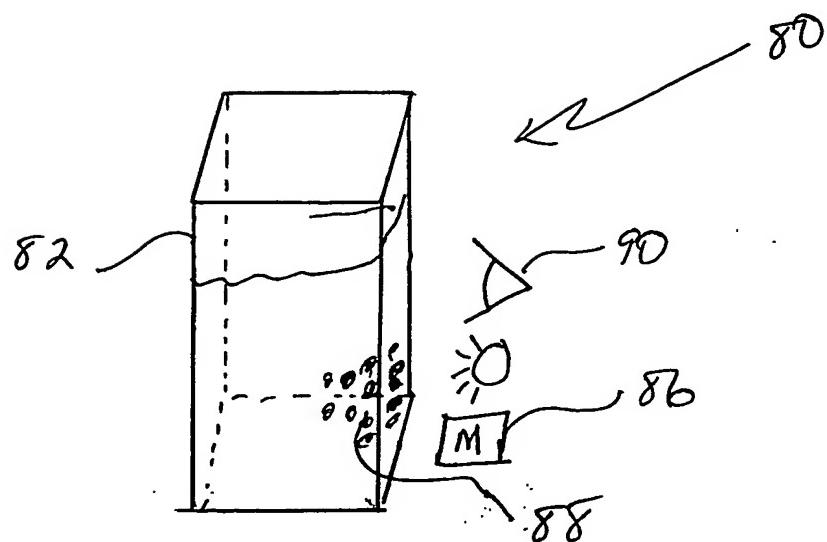


Fig. 19

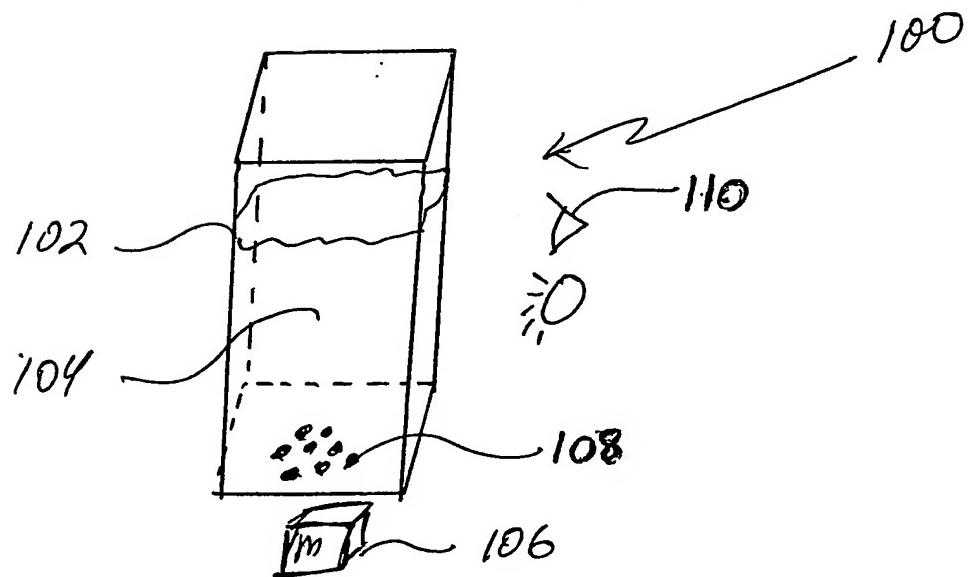


Fig. 20